

## REMARKS

In accordance with the foregoing, claims 1, 2, 12, 16 and 17 are amended. Claims 1-30 are pending and under consideration. No new matter is being presented, and approval and entry are respectfully requested.

### Claim Amendments

Claim 1 is amended to recite an input system including "a transmission part substantially simultaneously transmitting a first signal and a second signal through a wave direction unit, the first signal and the second signal being generated by having a plurality of different carrier frequencies modulated with the same input information." Claim 2 is amended herein to an input system "wherein the wave direction unit comprises a plurality of wave direction parts which are provided close to said transmission part so as to provide the first and second signals transmitted from said transmission part with directivity." Claims 16 and 17 are similarly amended herein.

Support for the amendments is found, for example, in Fig. 1 and paragraphs [0038] - [0043] of the specification.

Claim 12 is amended to correct a formality. No new matter is being presented, and approval and entry are respectfully requested.

### Item 3: Rejection of claims 12-15 and 24-29 under 35 U.S.C. §102(e)

In item 3 of the Office Action, the Examiner rejects claims 12-15 and 24-29 under 35 U.S.C. §102(e) as being anticipated by Hum et al. (U.S.P. 6,714, 133). (Action at pages 2-3). The rejection is traversed.

As set forth in MPEP §706.02 entitled Rejection on Prior Art, anticipation requires that the reference must teach every aspect of a claimed invention.

Independent claim 12 recites an input system including "an information generation part generating input information . . . ; a transmission part generating a signal . . . ; a plurality of wave direction parts provided close to said transmission part so as to provide the signal transmitted from said transmission part with directivity; and a reception part receiving the transmitted signal through each of the wave direction parts and demodulating the received signals into the same input information, wherein the signal transmitted at a timing from the transmission part is provided alternately to the wave direction parts so that the same input information is transmitted alternately through the wave direction parts (emphasis added)." Independent claim 22 has a similar recitation.

Hum does not support an anticipatory-type rejection by not describing features recited in

the present application's independent claims.

Applicants submit that Hum, in particular, does not teach an input system wherein a "signal transmitted at a timing from the transmission part is provided alternately to the wave direction parts so that the same input information is transmitted alternately through the wave direction parts," as the Examiner again incorrectly asserts. By contrast, Hum merely teaches:

The other coupling ports will simultaneously broadcast or transmit in an arbitrary pattern the same component of the interrogation signal 17a to the other transponders 18b and 18n.

(emphasis added, col. 5, lines 36-40).

That is, Hum teaches that the same (component of the) interrogation signal 17a is broadcast or transmitted simultaneously from the coupling ports 16a through 16n. That is, Hum merely teaches a simultaneous broadcast.

In item 6 of the Office Action, entitled Response To Arguments, the Examiner asserts:

Hum et al. does teach a signal transmitted at a timing from the transmission part is provided alternately to the wave direction parts so that the same input information is transmitted alternately through the wave direction parts by using an interrogation signal to be transmitted to the transponders 18a through 18n at one timing is to be transmitted simultaneously to the ports 16a through 16n (see col. 5, lines 30-35).

(Action at page 6).

The Examiner supports his assertion by relying on Hum's teaching:

[W]hen the coupling port 16a broadcasts the interrogation signal 17a one of the components of the signal will be intended for transponder 18a. The signal will cause the transponder to . . send an identification signal or ID code and/or data back to the interrogator through the coupling port 16a and communication line 14a. The other coupling ports will simultaneously broadcast or transmit in an arbitrary pattern the same component of the interrogation signal 17a.

(emphasis added, see, col. 5, lines 30-35)

That is, in essence, the Examiner asserts that signals "simultaneously broadcast or transmit," as taught by Hum teach signals that are "transmitted alternately," as recited by claim 12, for example.

Applicants submit that such a statement by the Examiner is contrary to ordinary understanding in the art and without support.

Applicants submit that as understood by one of ordinary skill in the art that signals transmitted "alternately" can be defined as signals transmitted "following one immediately after the other in a regular repeated pattern or sequence" (See, for example, Merriam-Webster

Online Dictionary at <<http://www.m-w.com/dictionary/alternately>>).

In contrast, signals transmitted "simultaneously" can be defined as signals transmitted as "occurring at the same time: exactly coincident." (See, for example, Merriam-Webster Online Dictionary at <<http://www.m-w.com/cgi-bin/dictionary?book= dictionary&va=simultaneously>>).

Accordingly, Applicants respectfully traverse the Examiner's statement and demand the Examiner produce authority for the statement, and specifically point out the following errors in the Examiner's action. First, the Examiner uses common knowledge as evidence for the rejection. As set forth in MPEP. §2144.03(E):

any facts so noticed should . . . serve only to 'fill in the gaps' in an insubstantial manner which might exist in the evidentiary showing made by the Examiner to support a particular ground of rejection. It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based.

Further, there is no evidence supporting the Examiner's assertion. See MPEP §2144.03(B) ("there must be some form of evidence in the record to support an assertion of common knowledge").

Accordingly, Applicants demand the Examiner provide adequate support for his statement or withdraw the rejection. In addition, Applicants request that the Examiner provide an affidavit as required under 37 CFR. § 1.104(d)(2) if the statement is made, at least in part, on personal knowledge or withdraw the rejection.

#### **Summary**

Since features recited by independent claims 12 and 24 (and respective dependent claims 13-15 and 25-27) are not taught by the cited art, the rejection should be withdrawn and claims 12-15 and 23-27 allowed.

#### **Item 5: Rejection of claims 1-11,16-23 and 30 under 35 U.S.C. §103(a)**

In item 5 of the Office Action, the Examiner rejects claims 1-11,16-23 and 30 under 35 U.S.C. §103(a) as being unpatentable over Hum in view of Sutton et al. (U.S.P. 6,915,112). The rejection is traversed.

Applicants submit that *prima facie* obviousness is not established since the cited art, alone or even in an *arguendo* combination, does not teach recited features of each of the independent claims.

Claim 1, for example, recites an input system including "an information generation part generating input information based on a given input operation; a transmission part substantially

simultaneously transmitting a first signal and a second signal through a wave direction unit, the first signal and the second signal being generated by having a plurality of different carrier frequencies modulated with the same input information; and a reception part receiving the transmitted signals and demodulating the signals into the same input information." Independent claims 16 and 30 have similar recitations.

The Action concedes that Hum does not teach simultaneously transmitting a first signal and a second signal with the same input. (Action at page 14, lines 10-11). However, the Examiner asserts that:

Hum teaches a reception part (6) receiving the transmitted signals and demodulating (4) the signals into the same input information (12). . . . Sutton et al. discloses in fig. 6 . . . simultaneously transmitting a first signal and a second signal with the same input (see multiple radios in the same device, the both radios can be used simultaneously, they maybe able to receive or send signals at the same time. . . obvious to . . . implement the transmitting system having a first and a second signals are transmitted simultaneously from the same antenna as taught by Sutton . . . into the information generation part generating input information based on a given input operation of Hum. . . (to) would provide both radios can be used simultaneously, for instance both radios may be to receive at the same time, both radios may be able to send at the same time.

(Action at page 4).

Applicants submit however, that Sutton, does not teach, in particular, an input system including "simultaneously transmitting a first signal and a second signal through a wave direction unit, the first signal and the second signal being generated by having a plurality of different carrier frequencies modulated with the same input information."

Applicants submit the Examiner's interpretation of the art relied on in support of the rejection is incorrect. By contrast, Sutton merely teaches that in Fig. 6:

Coupler and splitter 640 combines signals from the transmitters and provides the transmitted signal to the antenna 670.

(See, for example, Fig. 6 and col. 8, lines 4-8)

That is, according to Sutton, although transmitters 660A and 660B of FIG. 6 may output "a first signal and a second signal," the output first and second signals are combined in the coupler and splitter 640, and only a single combined signal is provided to the antenna 670 to be transmitted.

However, as recited by claim 1 of the present invention, for example, a transmission part transmits two separate first and second signals through a wave direction unit.

Applicants further submit that Hum does not teach a reception part receiving the

transmitted signals and demodulating the signals into the same input information, as the Examiner asserts. That is, Hum does not teach receiving a first signal and a second signal and demodulating the signal into a same input. Further, this feature is not taught by an *arguendo* combination of Hum with Sutton, since Sutton merely teaches receivers already receiving a decoupled signal.

**Summary**

Since features recited by claims 1-11,16-23 and 30 are not taught by even a combination of the art relied on by the Examiner in support of the rejection and *prima facie* obviousness is not established, the rejection should be withdrawn and claims 1-11,16-23 and 30 allowed.

**Conclusion**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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